

**Abstract (Basic): EP 516135 A**

A peptide prepn. (I) comprises at least 2 kinds of PND peptides of HIV gp120 each belonging to a different group where peptides in groups (I) to (V) have amino acid sequences with sec. structures XXXBBBX, XXBBBBX, XXXBBBB, XXBBBBB and BBBBXX respectively. B represents a beta strand structure and X a turn structure. In each case the 7 amino acids are adjacent to the GPGR region. The sec. structure is estimated by Robson's analytical method (GOR method).

Also new are (1) an antibody prepn. comprising specific neutralising antibodies against all the peptides of (I); (2) an anti-idiotype antibody prepn. comprising antibodies which specifically recognise the antigen binding sites of the antibodies of (1); (3) a method where the peptides of (I) are used to determine the type of neutralising antibody against HIV gp. 120 antigen, present in an HIV-infected individual; and (4) a method for determining a type of viral strain of HIV comprising (a) extracting an HIV genome or a part thereof from an HIV viral strain; (b) incorporating the DNA into E. coli; (c) determining the sequence encoding the PND region of HIV env gp120 ; and (d) subjecting the deduced prim. amino acid sequence to the GOR method to determine which group (I-V) the viral strain belongs to.

USE - (I) and the preps. of (1) and (2) can be used to treat or

diagnose HIV infection or in the prepn. of vaccines against  
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